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# EDUCATION IN JAPAN

Summary

The successes of the Japanese education system have become a popular topic in the United States, especially as American students continue to perform poorly by international standards in mathematics and science. While it is convenient to look at Japan's achievements in search of an answer to America's insufficiencies, its education system would be nearly impossible to transplant here. The Japanese system works in its own cultural context, but many of the same techniques/structures would be doomed to failure in the United States, which has quite a different cultural/philosophical bent. America's greatest lesson to learn from Japan is an abstract one -- that of long-term commitment to high-quality education from all levels of society, from the family unit to the federal government.

Despite its high marks in international rankings, Japan's education system continues to have its detractors on several levels. Among their criticisms are the rigors of the examination system and the lack of creative initiative, especially at the highest tiers of graduate education. Cross-cultural comparisons are important perhaps more for the self-examination they force than for the lessons they encourage.

## Structure of the Postwar Education System

A quick overview of the interconnections between the Japanese and the American educational systems shows that, while several U.S.-style approaches were the pattern for Japan's post-World War II education system, the mold was a

flexible one. With the preeminent industrial system of the time, the United States was seen as having an educational model that supported a strong economy. Thus, American occupation forces in Japan imposed elements of the U.S. system there. This restructuring included the establishment of the 6-3-3 grade system for elementary, junior high and senior high school and the requirement for nine years of compulsory schooling. Coeducation was introduced, and some textbooks were revised. Moral education (shushin), which had been used to promote nationalism before the war, was abolished. (These classes were reinstated as dotaku with a substantially different curriculum when Japan's Ministry of Education, Science and Culture resumed full control after the occupation ended in 1952.) Although school board elections were introduced in an effort to decentralize the education system, eventually Ministry of Education changes resulted in school board members being appointed.

Japanese children enter an educational structure superficially similar to that used in the United States. Children begin school at age 6 in the first grade, although many children have attended private kindergartens or nursery schools. Compulsory education officially ends after a child finishes junior high school, or reaches age 15; however, less than 6 percent of the junior high graduates today do not continue on to senior high school, despite tuition fees of approximately Y76,000 per year in public schools ($450 measured at Y169= $1.00, the 1986 average exchange rate. This was a sevenfold increase in yen terms from 1975). Because the Japanese education system is national, the level of education is generally uniform through grade 9. Textbooks and curriculum are approved nationally so children study essentially the same lessons at the same pace throughout the country.

Until they reach senior high school, children are not tracked according to ability levels as they are in Great Britain and some schools in the United States. Senior high schools are ranked academically or according to special interest, such as commercial or technical high schools. Students take entrance examinations to gain admission. Their junior high teachers generally recommend the school(s) that would be suitable for each pupil. For university-bound students, gaining admission to the proper senior high school is considered of tantamount importance in reaching the ultimate goal of admission to an elite college. Only the most academically rigorous upper secondary schools generally produce students capable of passing the examinations to the country's most prestigious universities.

A growing number of students are enrolling in four-year universities every year, although a large number of women still attend two-year junior colleges. More than half of the population has some education beyond the upper secondary school, including that gained in technical colleges. Although reaching university level is the pinnacle of Japanese education, American universities, especially graduate schools, are considered superior to many of those in Japan. In fact, through hard work at universities, the American student usually makes up the difference in educational levels that existed between himself and his Japanese counterpart in their earlier school careers. One of the exceptions to this is in the field of engineering, where the Japanese often maintain a lead even through the college years.

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Sources of the Difference

Despite some structural similarities between educational systems in the United States and Japan, deep-seated differences have led to Japan's superior achievements in the field of education, particularly those gained in the years of compulsory attendance. These differences can be broken down into several broad categories. First are the differences caused by a national versus a localized system. While the localized system can respond more to the special needs of the students in the area, it also can lag behind, leading to inequities in education levels. A second area of difference stems from the role of the parent, the family's dedication to education, the stability of family life and homogeneity, in particular the impact of common language and cultural values.

National vs. Local Systems - The difference between Japan's national system for education and the United States' more localized approach has important implications for the overall levels of education achieved. Under Japan's national system, the Ministry of Education sets up the curriculum and approves the textbooks. While schools do use different textbooks, generally they select them from a narrow range of choices; for example, about three different junior high school textbook series for English are in widespread use. Through the first nine years, all students are expected to keep up and achieve the same level of education. Under this system teachers generally cover the same material at the same pace throughout the country. If one were to visit a number of different schools in different prefectures, one would find them all keeping to this national timetable.

The students within one class often are divided into small study groups of mixed ability. In this way the quick learners are able to help the slower learners. When called on by the teacher to answer a question, a student usually will turn to his or her neighbors to check the answer before responding. This style of answering by group consensus is considered not only acceptable but the norm.

In sharp contrast, a majority of U.S. schools group students according to their abilities, starting in the early years of elementary school. Fast readers grouped together then leap far ahead of slow readers, who are struggling to grasp basic concepts. It is thus possible, though not as common as it once was, for an American student to get so far ahead of his peers that he will skip a grade in order to be continually challenged. Likewise, the slow learner can lag so far behind that he will have to repeat the same grade.

In Japan students generally are promoted en masse. It is considered the responsibility of the fast learners to teach the slow learners. Responding to the needs of both types of students are the increasingly prevalent special private schools called juku, attended after the regular school day and on weekends (see below). Here the remedial learner can get extra tutoring, while the advanced learner can move ahead.

Under the national system schools in Japan also receive basically the same amount of funding and thus have roughly the same facilities. This contributes to an equity in education levels. In the United States, where much of the funding is state and local, schools in areas that have a higher tax base can raise more money without requiring high levies. This means that the facilities available to children in wealthy suburbs can be considerably different

from those enjoyed by their inner-city counterparts. Also, more levels of tracking are available in wealthier, larger schools. In various areas gifted students may take classes at a junior college or even at a college when their schedules allow it. Bright students in Japan do not have an option of going to a university part-time.

Given its democratic base, Japan's education system through the first nine years is quite exemplary according to international standards. The requirements for entry into the nation's top universities, however, set the tone of Japanese education. Since admission is based on the results of a single exam, students spend years preparing. Those who fail the exam, called today's ronin or masterless samurai, study at a private school for a year, waiting for another chance, usually for admission to a school of lesser standing. Each university has its own test, and students usually can sit for only one or two exams each year since the tests -- especially those given by the most competitive schools -- are often given on the same day. There is no national equivalent to America's Scholastic Aptitude Test.

The lower levels of education, therefore, reflect the efforts of teachers and parents to best prepare children for the college entrance exams. Admission to the "right" university is seen as the key to a good job with a respected company, generally assuring a successful lifestyle. Professor Thomas Rohlen of Stanford University discusses in his book, Japan's High Schools, the disproportionately high number of top business executives and government officials who have gone to Tokyo University, a public university usually considered to be the best. For example, nearly 90 percent of top Ministry of Finance officials and over 75 percent of high-ranking Ministry of Foreign Affairs officials were graduated from Tokyo University, a survey in 1978 showed.[1]

The influence of the university-based entrance exam can be felt all the way down the educational line. Teachers often are afraid to be too innovative because unusual presentations may not help their students on the examinations. Teachers generally feel great pressure to follow Ministry of Education guidelines closely so that their students will not fall behind other students in the nation.

An example of the pressure related to university entrance exams can be seen in the reforms proposed for teaching English. Even though Japanese students are required to study English for six years, by the time they graduate from high school they have a difficult time with verbal comprehension and speaking, despite the fact that they often can read and translate difficult passages. Teachers spend very little time teaching these aural and oral skills because there is relatively little payoff for doing it. Extra time spent teaching translation or even obscure grammatical points potentially will help students pass difficult entrance examinations. Many teachers believe that only when listening comprehension and speaking skills are required for the entrance examinations will more time be allotted to their study. Some universities are considering plans to include a listening comprehension section on entrance examinations; if they do, changes are expected to reverberate in the high schools.

[1]Thomas Rohlen, Japan's High Schools (Berkeley, California: University of California Press, 1983), p. 91.

Another way university exam pressure impacts lower levels of education is the search for a loophole. Some parents hope to help their children avoid the exam, so they enter their children in elementary and secondary schools affiliated with certain private universities in a bid to gain automatic admission. But sending a child through the private school system is a costly undertaking. (Typical private upper secondary school tuition in 1986 cost Y184,000 a year, or $1,089 at Y169=$1.00, the year's average exchange rate. Private kindergarten tuition at that time generally cost around Y128,000 a year, $757.)

Some private schools, which are not affiliated with colleges, have good track records for getting students into leading universities. Although expensive, they are becoming more popular as parents try to increase their child's chances of university acceptance by gaining admission to the right senior high, junior high, elementary school and even kindergarten. In 1985, only 0.5 percent of elementary school students were enrolled in private schools but this rose to 2.9 percent for junior high school students. At the non-compulsory high school level, more than 28 percent of the students attended private school.[2] All along the line these private schools have rigorous entrance examinations. This drive to succeed by achieving the highest possible educational goal has its roots in societal values.

Societal Values - The high value placed on education and learning in Japan, which fostered high literacy rates even during pre-Meiji periods, largely stems from Confucian and Buddhist beliefs. Postwar Japan, seeing people as the greatest of its few natural resources, has become education-crazed, with schools not only for young children but many types of schools aimed at adult education.

Although always held in high esteem, education was seen after World War II as a way of ensuring national economic development as well as personal success. If a family sacrificed to help a son (rarely a daughter) to succeed in entering a top university, his eventual employment in a highly paid position ensured that he could take care of his parents in their old age. It was considered a wise investment and one of the surest ways to escape the difficult agricultural or factory life.

Those who nourish this investment -- teachers -- have a special, respected position in Japanese society, more on a par with the university professor in the United States. This esteem for teachers and education has spread beyond the classroom and led to a proliferation of people seeking certification as teachers of flower arrangement, skiing and other skills.

Placing education on such a pedestal also has led to the creation of "education mamas," mothers preoccupied with helping their children succeed along the arduous education road. Kyoiku mothers are ever alert to the needs of their children. Along with providing creature comforts, such as snacks, they are known for preparing the lessons either ahead of or along with their child so as to be able to better provide assistance. And for older children, kyoiku mothers provide juku tuition.

Even the family structure enables the mother to develop this special education relationship. In a typical Japanese household the father works late and goes out after work with business colleagues; his return home often is after

[2]U.S. Department of Education, Japanese Education Today (Washington, D.C.: U.S. Government Printing Office, 1987), p. 77.

younger children have gone to sleep. But the mother spends the bulk of her time with the children.

Sociologists often divide the family unit in Japan into father and mother/child, whereas in the United States the relationship is usually father/mother and child. Many women in Japan do not work or certainly do not work full-time if they have children. Society places primary importance on the mother being at home with her children. Divorce rates and the number of single-parent families are considerably lower in Japan than in the United States.

Since the nonworking mother often does not have close contact with many people outside the home or have employment as a means for personal feedback, sociologists believe that one aspect of the education mama syndrome reflects the phenomenon that if the mother can succeed in producing accomplished children, then she herself is a success. Thus, having children enter a prestigious university is not just a matter of helping the children; it in fact is related to her self-esteem. If her children fail, then she fails as well. While this cannot be applied to all cases, it holds some general truths and is similar to the "stage mom" syndrome in the United States, though this is much more rare.

Another important difference in Japanese societal attitudes toward education is how an ideal child is defined.[3] Highly prized qualities in the American child are individuality, creativity and initiative. The qualities hoped for in a Japanese child, on the other hand, are cooperativeness, diligence and perseverance. Classroom structure in Japan emphasizes these traits by expecting students to work with each other to get the answer and to persevere in sports. Students are not expected to assert their individuality by answering alone. Bright students often feed answers through other students and are reluctant to speak up even if they are correct.

A popular phrase used in Japan to illustrate the disdain for those who stand out (for good or bad) is "the nail that stands up, gets hammered down." This philosophy is quite different from Americans' approach of "doing your own work" or their willingness to speak up. To first-time American observers in a Japanese classroom, the team-effort answers of the pupils usually appear to be "cheating" rather than learning. The lessons in teamwork that the Japanese pupil learns, however, last a lifetime and follow him/her into the workplace.

Many in Japan consider the homogeneous nature of their society to be one of the critical factors in the education system. This idea has been criticized internationally. While the homogeneity of Japanese society has contributed in some ways to achieving a uniformly high educational standard -- through a common language, a general middle-class status undisrupted by immigrants with less wealth or education and different societal values -- critics in the United States and elsewhere stress the values of heterogeneity and the individual -- wide dissemination of ideas, creativity and (ideally) tolerance.

One of the ideas behind America's public education system long has been to help equalize opportunity -- especially since this country is a nation built on immigration. Japan, however, does not have some of the worst problems that

[3]Merry White, The Japanese Educational Challenge (New York, New York: The Free Press, 1987), p. 25.

plague the U.S. system.[4] Here, poverty, the availability of illegal drugs, a lack of common English literacy among many children entering school, and single-parent families contribute to educational levels that, in the aggregate, are lower than in Japan.

The role of teachers provides an insight into the differences in societal values between the United States and Japan, particularly varying attitudes toward the individual, the family, and society's expectations. While U.S. educators lament the lack of respect for teachers here as compared to Japan, many ignore the greater responsibilities for students -- beyond regular teaching -- that the teacher in Japan is assigned, some of which are lifetime commitments. The homeroom teacher has a much closer relationship with his class than his U.S. counterpart has. While the American teacher takes attendance, makes announcements and discusses school problems, the responsibilities of his Japanese counterpart go much deeper. The Japanese educator may be a homeroom teacher throughout a particular class's time in the school, typically following a junior or senior high class through three years. During that time he will read students' daily diaries to learn of any problems that may be developing, and he will be required to visit the home of each of his students at least once. If his students get into trouble, such as shoplifting or truancy, the teacher often is called first -- not the parents -- and he must deal with the police or shopkeepers. The homeroom teacher also is responsible for helping his students find employment on graduation if they do not go on to college.

It is frequently on the teacher, rather than the parent, that the burden of discipline rests. Young children often are indulged at home because many Japanese parents feel that school will teach discipline soon enough. Teachers are responsible for the societal moral education of their students, a subject that has similarities to civics class. The role of regulator falls on the teacher as he must check students' uniforms, which in some schools means checking skirt length or pant-leg width, jacket length, tie length, color of socks and, in some cases, even coats, shoes and satchels. Many teachers dislike this role because they say the rules are too severe or they cannot properly judge infractions. Reminiscent of civil rights controversies in American schools over hair length, most schools in Japan do not allow students to perm their hair, but teachers admit they cannot always judge clearly whether or not a student has natural curl in his/her hair.

The regulator also must carry out the discipline. In the most extreme cases in Japan, physical punishment is allowed. This is not to say that it is

[4]Two criticisms of the Japanese system revolve around bullying (ijime) and the suicide rate of children. Detractors point to the stress of the examination system as leading to high suicide rates. The following is a comparison of the child suicide rates between the United States and Japan for 1985, taken from Statistics and Information Department, Ministry of Health and Welfare and from Vital Statistics of the United States, U.S. National Center for Health Statistics.

Suicides as Percentage of Total Deaths (By Age Group)

| | Japan | United States |
|---|---|---|
| Both sexes (15-24) | 18% | 13% |
| Males (15-24) | 17 | 21 |
| Females (15-24) | 21 | 4 |

common or that all teachers approve of it, but it remains legal. In the United States, if a teacher hits a student, it is possible for that student or his parents to sue the teacher. By being the role model, counselor and disciplinarian, a teacher in Japan often gains respect but carries more responsibilities than American parents might willingly assign to someone outside the family.

Another societal structure within the education system that dramatically contrasts Japan and the United States is extracurricular activities. In the United States, students from an early age are involved in school activities and often in community activities, which may involve students from one or more schools. While youngsters may play in the school band or be on a sports team after school, they, at some point in their lives, probably are members of such other groups as Little League, Boy/Girl Scouts, the community pool or church activities where they will develop friendships with children who do not attend the same school.

In Japan activities and friendships tend to revolve almost exclusively around school. School vacations are structured so that there is no extended summer vacation. A five-and-a-half-day school week (with Saturday morning classes) reinforces the socialization with students from the same school. In fact, many students spend time at school during vacations participating in club activities. Also, students through junior high school are with the same group of students all day long; they do not switch classes as most do at that level in the United States.

This emphasis on extracurricular activities often is accused of taking U.S. students away from their studies, while advocates emphasize that students active outside of school gain from a broader experience. The question they ask is how much importance should be placed on formal education. The answer in Japan is obvious from the number of students and the amount of time spent attending jukus. Some of the special schools are for academic training, remedial work, accelerated studies, or just more depth. Jukus are one of the reasons that the quick-paced national curriculum can be followed by nearly everyone. They enable extra review for slow learners and generally can reinforce what was taught in a regular lesson.

Sometimes, however, teachers find themselves in conflict with the teaching at jukus and feel their authority is being challenged. A teacher who is rushed through an explanation to keep pace with the national curriculum can find his position threatened, especially if the juku teacher happens to be better or is able to get results through teaching "test tricks."

Jukus also are well known for their preparation of junior and senior high school students for entrance examinations to senior high school or university. While the majority of juku pupils are secondary school students, the enrollment of elementary school students, who are preparing to enter private junior high schools, has been growing. Not all juku, however, teach academic subjects in conjunction with regular classes. Students often can learn "extras," such as how to play the piano, or get a head start by learning English before the subject is taught in regular classes.

System Reforms

The use of jukus does not seem to be an element that school boards in the United States could easily adapt to augment their teaching of mathematics

and science, two areas in which American students have fallen far behind international standards. While highly motivated students might be willing to attend, it is unlikely that the general public would want -- or have the desire to pay for -- such a system.

Just as educators in this country are searching for ways to improve the educational system, the Japanese have been reviewing their own system and its shortcomings. In 1985 the Education Ministry held a series of hearings on what was called the Third Reform, an attempt to address problems in the context of current changes in Japan. (The Second Reform occurred with the occupation forces and the first was implemented during the Meiji era in the late 1800s, both periods of intense adaptation of Western thought.)

While the realization of reforms has not yet taken off, among the reform elements being considered in Japan are curriculum changes, increased internationalization, improvements of university-level education, more freedoms for students and ways to stimulate more creativity. Proposals to increase freedoms include fewer uniform regulations and other petty rules but not abolition of them. Also, Japan is seeking ways to counteract the international criticism of its lack of creativity and innovation. The United States still is viewed as having an edge in the pure sciences. Japan also is taking steps to revise the way English is taught in order to place more emphasis on listening and speaking skills. Although educators hope to make advances, many fear that more freedom for students or other reforms might erode the high standards of Japan's education system.

Meanwhile, the United States is trying to figure out how Japan achieves higher levels of education with larger class sizes and less money spent as a percentage of gross national product. (In 1983, the United States spent 6.8 percent of its GNP on public education, while Japan's share was 5.6 percent.) American schools are looking toward more discipline, ways to encourage students to spend more hours studying, and the possibility of uniforms.

Neither education system is without faults and both are bound to become better as they reevaluate and adopt the best elements from the other. The biggest U.S. challenge is to raise overall education standards and to improve the equality of education received. Japan recognizes its need to increase opportunities for creativity and innovation. The solutions cannot be directly adopted from the other country due to cultural/societal differences. One question, however, is whether there are sufficient rewards from society to make the individual change. America is seeking motivational factors to raise overall levels of education as well as to keep inner-city youth in school instead of on the street selling drugs. Some education experts suggest that a recent increase in the involvement of American business in education could help turn the situation around. Many eyes are on a school in Chicago funded by business concerns, but it is too early to see what kind of long-term commitment or results will evolve. In Japan educators are weighing the use of rewards for innovations, particularly to young scientists and professors, and the provision of more opportunities to pursue those goals.

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The views expressed in this report are those of the author and do not necessarily represent those of the Japan Economic Institute.